

REMARKS

Reconsideration of the above-identified patent application is respectfully requested.

The drawings received on November 29, 2004 are indicated as failing to comply with 37 CFR §1.84. No particular drawing deficiencies were identified. Attached hereto is a fresh set of drawings with each sheet labeled in the top margin as a "Replacement sheet." The replacement sheets do not include any changes to the drawings received on November 29, 2004, and are simply re-printed versions of these drawings. No new matter has been added.

Substantively, claims 4, 9-10, 16 and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,298,728 to Fekete et al. Claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,439,728 to Rickman, Jr. in view of Fekete et al. Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,408,834 to Brackney et al. in view of Fekete et al. Claims 7-8, 11-14, 17 and 19-22 are objected to and are indicated as being allowable if rewritten in independent form including all of the limitations of the corresponding rejected base claim and any intervening claims. For at least the following reasons, applicants respectfully traverse these rejections.

Regarding the §102(b) rejection of claims 4 and 16, applicants assert that neither claim is anticipated by Fekete et al. A claim is anticipated only if each and every

element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference, and the identical invention must be shown in as complete detail as is contained in the claim. MPEP §2131. Here, each and every element of applicants' claim 4 and claim 16 is not found in Fekete et al.

For example, applicants' claim 4 requires "a rate limiter having an input receiving the speed signal and an output producing a rate limited speed signal," and claim 16 requires the step of "rate limiting the speed signal to produce a rate limited speed signal." Applicants assert that a rate limiter, or the act of rate limiting, is generally understood by persons of ordinary skill in the art to which the subject claims pertain to be a device or technique that regulates the rate at which a signal is varied so as to keep the signal within specified parameters. Indeed, one illustrative embodiment of the rate limiter disclosed in applicants' disclosure is a two-stage rate limiter wherein each stage produces an output signal having a current sample magnitude that is limited to the sum of the magnitude of the previous speed signal sample and a specified rate limit value if the difference between the current speed signal sample and the previous speed signal sample is greater than a specified rate limit threshold (see FIGS. 6-7, page 7, lines 3-26 and page 11 lines 16-29.

The bandpass filter (13) of Fekete et al. is cited as satisfying the rate limiter limitation of claim 1 and the act of rate limiting limitation of claim 16. However, a bandpass filter is generally understood by those skilled in the art to operate in a manner that passes all signal content occurring in a frequency band or window specified

between two frequencies, and generally does not attenuate or otherwise modify the magnitude of the signal in the specified frequency band or window. Nothing in the description of the Fekete et al. bandpass filter (13) is contrary to this general bandpass filter description, and nowhere do Fekete et al. describe that the bandpass filter (13) in any way alters the magnitude of the signal in the specified frequency band or window. Accordingly, the Fekete et al. bandpass filter (13) does not meet applicants' rate limiter limitation of claim 1 or applicants' rate limiting step of claim 16, and Fekete et al. therefore cannot anticipate applicants' claim 1 or claim 16 for this reason alone.

Applicants' claim 1 further requires "an envelope filter having an input receiving the rate limited speed signal and an output producing a filtered and rate limited speed signal," and claim 16 requires the step of "envelope filtering the rate limited speed signal to produce an envelope filtered and rate limited speed signal." Applicants assert that an envelope filter, or the act of envelope filtering, is generally understood by persons of ordinary skill in the art to which the subject claims pertain to be a device or technique that produces an output having a variable magnitude that generally tracks the shape or "envelope" defined by the magnitudes of several input samples. Indeed, one illustrative embodiment of the envelope filter disclosed in applicants' disclosure includes an "N" size buffer containing the magnitudes of the most recent "N" input samples and a MAX block configured to produce as an output the maximum value of the "N" samples contained in the buffer. (see FIGS. 9-10 and page 12, line 18 - page 13 line 2. Another illustrative embodiment of the envelope filter disclosed in applicants' disclosure is configured to produce an output having a value equal to the sum of the previous output

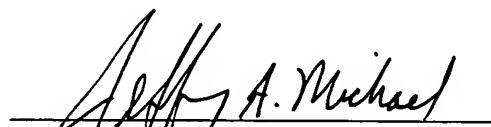
value and a fraction of the difference between the current input value and the previous output value (see FIG. 11 and page 13, lines 8-12. In either case, it is clear that applicants' envelope filter produces an output having a magnitude that is defined in some manner as a function of the magnitude of one or more input samples.

The low pass filter (16) of Fekete et al. is cited as satisfying the envelope filter limitation of claim 1 and the act of envelope filtering limitation of claim 16. However, a low pass filter is generally understood by those skilled in the art to operate in a manner that passes all signal content occurring at frequencies below a specified frequency, and that generally does not attenuate or otherwise modify the magnitude of the signal in the pass band. Nothing in the description of the Fekete et al. low pass filter (16) is contrary to this general low pass filter description, and nowhere do Fekete et al. describe that the low pass filter (16) in any way alters the magnitude of the signal in the specified low frequency pass band. Accordingly, the Fekete et al. low pass filter (16) does not meet applicants' envelope filter limitation of claim 1 or applicants' envelope filtering step of claim 16, and Fekete et al. therefore cannot anticipate applicants' claim 1 or claim 16 for yet another reason.

Applicants note that none of the remaining references of record show, disclose, teach or suggest the foregoing limitations, either alone or in combination. Since claims 5-15 ultimately depend from claim 1 and claims 17-22 ultimately depend from claim 16, claims 5-15 and 17-22 are believed to be patentably distinct from all references of record for at least the reasons given herein for claims 4 and 16.

Claims 4-22 are believed to be in condition for allowance, and such action is solicited. The Examiner is cordially invited to contact the undersigned by telephone to discuss any unresolved matters.

Respectfully submitted,



Jeffrey A. Michael
Registration No. 37,394
Barnes & Thornburg
11 South Meridian Street
Indianapolis, Indiana 46204-3335
Telephone: (317) 231-7382
Fax: (317) 231-7433

Attachment: Replacement drawings - nine (9) sheets